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RETARGETING – THE CASE OF LANDING.JOBS

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1. ABSTRACT

In this dissertation it was intended to study how an online advertising technique called retargeting can help Landing.jobs on its marketing efforts. In order to do that, a research methodology mixing both quantitative and qualitative research methods was created, considering the company's expectations for this study as well as the research objective that was defined. Through the analysis of three different advertisements, it was concluded that this technique may yield more effective results than other similar techniques. As such, the findings of this study may help not only to steer future lines of research on related subjects in the best

direction, but also other businesses apply the same strategy, in order to create more effective advertisements targeting niche audiences.

Keywords: Retargeting, Landing.jobs, Online Advertising

2. INTRODUCTION

This Master's thesis aims at examining and evaluating both the process and outcomes of the application of a particular online advertising technique called retargeting on helping a specific company reaching one of its business goals. Retargeting has not been subject of extensive academic research, at least that the author of this dissertation is aware of, especially when it comes to its applications to either Portuguese consumers or Portuguese companies. Due to the growing popularity of not only online advertising in general, but also retargeting in particular, it was believed that this topic should be subject of research. A start-up company, Landing.jobs (**LJ** from here onwards), was purposely chosen to work with, since the author¹ believed it would be easier to develop the research in comparison with a larger corporation². LJ is an online candidate-driven tech jobs marketplace that helps its clients hire and manage tech professionals. One of its main revenue streams is promoting its clients' job openings, in such a way that leads to high quality candidates applying for those positions. Knowing that LJ relies on other types of digital platforms to run most of its operations, and also that it is always looking for new ways to work more efficiently and effectively, the author suggested using retargeting because, in theory, it would help the company better advertise its clients' job openings. So, a partnership was established between the author and LJ, defining the terms of the partnership, in order to test how retargeting could help LJ attract candidates to one of its client's job openings using Facebook retargeting. The study analysed three different ads, comparing these not only between themselves, but also with other Facebook ads from the company. The following sections of this

¹ When "author" is mentioned it is referred to the author of this dissertation.

² Previous working experiences with big companies led to this decision. As an example, the author developed a consulting project for one of the world's largest telecom providers, in which he became aware that the whole process of posting something on that company's Facebook page takes at least one month, from the moment of the submission of the proposal to the actual publication.

dissertation (contextualization, literature review, methodology, results, conclusions, future research and recommendations and limitations to the research) try to provide a clear picture of why this is a relevant topic that should be studied now, why and how the research was conducted and how the results that were attained may have future theoretical and practical implications, bearing in mind that there were limitations that constrained the research process. Finally, the attachments section includes further information on relevant aspects of this study, to complement the information that lies on the main document.

3. CONTEXTUALIZATION

This section starts with an overview of the company analysed in this study, followed by a description of the main characteristics of its main target audience. Then, the agreement that was established defining how the partnership would work is presented and finally a description of the advertising channel used to conduct the research.

a) LJ – company overview

The platform gathers a wide variety of tech professionals, mainly software developers (**developers** from here onwards – more information on the different types of tech professionals can be found on **appendix A**). This start-up company has two types of users: individual users - tech professionals, who do not pay for any of the features they can benefit from and they are only required to create a profile to have access to all the perks of being a part of LJ's candidate pool; organisations - entities paying for LJ's range of solutions, which consist in dealing with the whole recruiting process and raising brand awareness. LJ attracts, assesses and engages with their user base so that each user may later apply on relevant job opportunities from its paying customers. The company works throughout the whole recruiting process, in an attempt to provide the client company only with a set of highly-filtered candidates that would ultimately best suit their needs, so that the organisation (client) can focus on its core activities³.

³ More information on LJ's job curation process and product range can be found on **appendix B**.

b) Tech professionals' attitude towards the job market

According to CEDEFOP (European Centre for the Development of Vocational Training) (CEDEFOP, 2015), there is a shortage of tech professionals, not only in Portugal, but also in Europe and other parts of the world. The demand is quite high for these professionals (Money, 2015; CIO, 2014], endangering non-tech professionals' jobs (Techcrunch, 2015). With such a demand for a scarce supply, usually these professionals usually have a passive attitude towards employment: it is not hard to land a good job and they do not usually look for it (PPLWARE, 2015c; PPLWARE, 2015b). In particular, Portugal faces the same reality and the Portuguese Government also acknowledges that there is this technical skill gap in the job market that can be fought by teaching people how to code (SNS, 2015; PPLWARE, 2015^a). As a consequence, companies usually have a hard time in hiring this type of professionals.

c) Agreement

The initial retargeting proposal to LJ was in far more complex than the one that was actually put in place. However, the author soon realized that even though LJ is a start-up company, there were too many operational constraints that would not enable the development of a robust research if the researcher was to follow the initial plan. Furthermore, LJ's employees acknowledged that all of the campaigns that had run on Facebook had not been created by digital marketing experts and nobody from their current team had had previous on-the-field experience in creating digital marketing campaigns. This means that there was never a clear long-run digital marketing strategy, rather just some periodic investments on digital marketing on Facebook and Google, which most of the times were ran out without proper planning and execution. As a consequence, the scope of this project was reshaped, as well as the degree of complexity of not only the research methodology, but also of the set of tests to be put in place and the resources that would be necessary. Therefore, LJ agreed to work on a retargeting strategy directly on one single platform, Facebook, for a job opportunity of one of their biggest

and most important clients - Java back-end developer position for a telecommunications company (company **X** from here onwards) that delivers television and broadband internet services and fixed line telephone services to both consumers and businesses. Although this decision increased dramatically the author's control over the whole research process, to the constraints arising from LJ's lack of organizational operational agility there were still to sum up LJ's client even larger operational slowness – X is an enormous company, with a vast range of complex guidelines for everything that concerns its public exposure. This, in turn, would have immediate implications campaigns' structure, as X would have to approve all the images and/or videos, as well as the messages used in each campaign and marketing channels, before the initiatives came to public. Thus, this project should be carried out in such a way that would enable LJ to keep the strategy in the long run –the main goal of this project was to devise a digital strategic plan that would be: 1) easily understandable for anyone in LJ's team, who have slim to none knowledge on such activities; 2) financially sustainable; 3) effortlessly put in practice, once the author of this dissertation is no longer working with the company, by anyone on the team that, in the future, may become in charge of maintaining it. In exchange, LJ would provide all the relevant data and resources to conduct the research, including access to its traffic data and a pre-determined marketing budget to be allocated to the project.

d) Facebook

According to **Bloomberg (2016)**, Facebook builds products that enable people to connect and share several types of different contents (text files, ideas, photos, videos, among others) – it is an online social networking service that allows its users to connect with friends and family as well as make new connections. Its product range includes not only Facebook itself, but also Instagram, Messenger, WhatsApp and Oculus. In order to use the platform, its users are required to create a profile, in which they can then update life information, upload pictures, send friend requests among many other ways to share their daily activities. Moreover, its users

can also build up pages related to a vast array of topics, such as sports, business, nature, fashion and lifestyle. Facebook's growth and popularity caught the attention of many companies and investors, facing several acquisition attempts throughout its development. For example, Friendster attempted to acquire the social network for \$10 MM in 2004 but Mark Zuckerberg turned down the offer. It is the world's largest social network with over 1.79 B monthly active users (**Zephoria, 2015; Facebook (2016c)**). Companies can use Facebook for marketing purposes, through both Facebook's Power Editor and Ads Manager. "Ads Manager is where you can view, make changes and see results for all your campaigns, ad sets and ads." (**Facebook, 2016d**). "Power Editor is a Facebook advertising tool designed for larger advertisers who want to create, edit and publish multiple ads at once and have precise control of their campaigns." (**Facebook, 2016a**). Simply put, an advertiser can create and manage their Facebook campaigns using both the Ads Manager and the Power Editor. The difference between the two lies on the number and complexity of marketing campaigns actually created: Ads Manager is a better option for slight changes and simple ads with few settings; Power editor enables advertisers to create and manage several campaigns at the same time, whilst also offering a much wider number of settings throughout the whole campaign design process⁴. With that said, due to being the world's largest social network with a tremendous user reach and for enabling advertisers to run various types of marketing campaigns with a large number of different characteristics, the author believes Facebook is one of the go-to online advertising channels LJ should use in its online advertising efforts. When this study was started, LJ had run a total of 538 Facebook campaigns (some were still live and others were scheduled to start running later), 796 adverts sets and 1255 ads since its Facebook page was created in 2013, 26.542 page likes and 26.222 followers. Of these, there were 7 partially live – not all of its ads were running since some were already finished (**Facebook, 2016e**).

⁴ More information and regarding campaigns, advert sets and ads can be found on **appendix C**.

4. LITERATURE REVIEW

This section starts with an overview of online advertising, followed by a description of the technique, description of the underlying process and growing popularity of retargeting. Then, the benefits of information specificity in display advertising are outlined.

a) Online Advertising

Evans, David S. (2009) defined Online Advertising as “Advertising delivered over the Internet”, since it is composed by a wide set of digital advertising channels (**Kantola, Jose, 2014**). According to **Goldfarb, Adi (2013)**, online advertising adoption has been increasing, representing a large proportion of the total advertising market. The fact that people are spending more time of their media consumption through on Internet is the main driver for this large proportion. Some of the most important technology companies, such as Facebook and Google, have been using advertising through the Internet to generate revenue. Online Advertising started in 1994 (**Evans, David S., 2009**) and since then it has been experiencing many technological evolutions and founding new advertising and tracking methods. This evolution allowed for significant reductions in transactions costs between merchants and consumers (**Evans, David S., 2009**), which makes online advertising much more attractive than the traditional one. In fact, for **Goldfarb, Adi (2013)** “online advertising is different because the technology that underlies online advertising reduces the cost of targeting” (**Goldfarb, Adi, 2013**).

b) Retargeting

(1) Definition and distinction with remarketing

According to **Goldfarb, Adi (2013)**, retargeting “involves showing an ad to a user who searched for (or saw) a particular kind of content”. Simply put, retargeting is an online advertising technique that allows advertisers to reengage with visitors who have already made a visit to the advertiser’s website, assuming that that visit is signalling some kind of interest of that user on the company or on that specific product/service. This consists in targeting users

that have already visited the website but ended up not completing a desired action by, for example, showing them customized ads repeatedly or sending out personalized e-mails to these specific type of users. As such, and according to **Kantola, Jose (2014)**, customers who have already displayed interest in a product or service can be targeted by retargeting, using ad content that may be relevant for them (**Kantola, Jose (2014)**). Usually, this technique yields effective results, because the advertiser is targeting an audience that has already interacted with the product/service. Consequently, for customers who have demonstrated some type of interest in the brand, leading these users to perform a desired action will then be easier (**Lambrecht and Tucker, 2013**). Oftentimes, retargeting is referred to as being the same as remarketing, although the two have different meanings. Though remarketing refers to the process of collecting information of a customer, to later use it to design tailored marketing campaigns via mail or email, retargeting is a more recent term that refers to using user data from previous interactions and different sources of information to create marketing campaigns specific for each customer for every relevant and available online marketing channel (**Lambrecht and Tucker, 2013**). In short, remarketing is channel-specific (mail or e-mail), whereas retargeting is not. Bearing all of this in mind, in the case of LJ, Facebook retargeting appeared to be, in theory, a technique that could improve the efficiency and effectiveness of the company's digital marketing efforts, especially due to the large variety of targeting techniques that allow LJ to narrow down its audience and reach only the type of talent the company is looking for. Furthermore, by analysing the use of this technique to the specific case of LJ, valuable insights can be withdrawn that may be used to improve the current academic and practical knowledge that there is under analysis.

(2) Description of the process

According to as **Lambrecht and Tucker(2013)**, advertising networks are usually responsible for organizing retargeting on behalf of firms. These networks acquire space across different

publishers of web content in order to sell that space to advertisers. In fact, the efficiency in the market for online ad space increases via this process, since advertisers are not required to manage relationships with a large number of web publishers. The process can be divided into several stages, as **Lambrecht and Tucker (2013)** describe: 1) Product exposure: firstly, the customer browses through the firm's website and views and analyses its products. Then, for each product visualized, a pixel tag (1x1 image) is automatically downloaded, registering which are the products that customer is seeing. Afterwards, the data has to be integrated in the individual user profile, held by the ad network, which acts on behalf of the firm. This data is also traditionally tracked by cookies; 2) Targeting Consumers: when a customer is browsing the Internet and at a certain point this customer visits a website with ads provided by an advertising network that offers retargeted advertising. Through the cookie, the advertising network identifies the customer visit to firm's website; 3) Ad Design: in generic retargeting, the individual cookie profile is used to identify the set of people who have previously visited the firm's website. Then, generic ads from the firm are shown instead of showing ads from another company to these customers. Usually, the generic ads display an image strongly related to the category; 4) Purchase: finally, the consumer ended up by purchasing from the firm's website. This purchase is registered by the ad network in its individual-level profile and linked to any ad exposures. Usually, after the purchase the consumer will not be targeted again, except if he/she visits the website later.

(3) Growing popularity

As mentioned, this technique may yield very effective results: since the advertiser is targeting an audience that has already interacted with the product/service, it is normally easier to lead these individuals to perform a desired action (**Lambrecht and Tucker, 2013**). A clear example of that was pointed out by Criteo and Adroll, in which the former claims that personalized retargeted ads are six times more effective than standard banner ads and the later claims their

customers earn \$10 for each \$1 invested on the platform (**Kissmetrics, 2013**). Therefore, retargeting has been building up much enthusiasm among online advertising developers. (**Lambrecht and Tucker, 2013**). Large companies who offer digital marketing solutions to its customers, such as Google and Facebook, allow their clients to install their own pixel on their websites, thus offering a retargeting complement to their current marketing efforts on those platforms – in the case of Facebook, retargeting is even considered as being a very important component of its advertising strategy (**Lambrecht and Tucker, 2013**). One of the reasons why retargeting is growing in popularity is the array of targeting optimization possibilities it provides. By combining so many different pieces of information of its users, advertisers are able to create initiatives that reflect a deep understanding of their customers. One downside of retargeting, however, is that although retargeting can be an extremely accurate and effective advertising method, it can also create fear among customers if they get anxious about their privacy is being violated or feel that they are being stalked by the ads. This raises the question of how retargeting ads should be designed and targeted in order to find an optimal compromise between ad personalization and accuracy and avoiding a too intrusive appearance.

c) Benefits of information specificity in display advertising

As **Lambrecht and Tucker (2013)** referred, it is predicted that this type of advertising increases relevance and, therefore, increases advertising effectiveness. However, in **Lambrecht and Tucker (2013)** surprisingly found that “increased specificity of ad content is on average less effective than generic ad content”. This can be explained by the incompatibility between the specificity of the ad content and the level by which consumer has product preferences well-defined. In this authors’ study, it was found that “only when consumers gave well-defined product preferences and are actively involved in the category, is specific advertising content more effective than generic ad content”. Therefore, in order to obtain the benefits of digital marketing, firms have to evaluate how and when they should use online

advertising. For **Lambrecht and Tucker (2013)**, firms have to analyze what is the most suited data in their specific product category and also pay special attention to browsing behavior of consumers across not only their own website, but also across external ones. Thus, if a firm uses specific ad content without knowing very well their customer preferences, this strategy may be quite ineffective, since firms can be displaying content which is not aligned with their customers' preferences. Lastly, is also important to refer that highly specific advertising is relatively more effective after a customer seeing the website of a firm than before seeing that. **Lambrecht and Tucker (2013)**. More related to retargeting purposes **Lambrech and Tucker (2013)** argue that a common way to create targeted advertising lists is to analyse customers' preferences, purchasing histories and future purchasing intentions using data from company's customer-information databases. Similarly, **Lambrech and Tucker (2013)** have stated that existing marketing literature has emphasized that greater specificity of a firm's interactions with consumers should increase relevance and consumer response.

5. METHODOLOGY

This section starts with a description of the approach that was used to conduct the research process, followed by one of its most important components and then the actual action plan that was put in place.

a) Approach

The research methodology was segmented into different components, using different types of secondary and primary data, as well as qualitative and quantitative research methods. Firstly, a meeting with LJ's team was held, in order to establish the partnership agreement and define how the whole project was going to be executed. From that meeting onwards, and due to the scarce literature found on the subject, in the initial stage of the research process the author

decided to contact directly two Portuguese field experts⁵, through two in-depth interviews, in order to better define the problem setting and consequent approach – according to **Malhotra, Naresh K. (2010)**, “interviews with experts are more useful in conducting marketing research for industrial firms and for products of a technical nature [such as LJ], where it is relatively easy to identify and approach the experts. This method is also helpful in situations where little information is available from other sources.” Malhotra also claims that this qualitative research method should be used in an initial stage of the research process in this type of cases where there is information shortage, since “qualitative research provides insights and understanding of the problem setting”. In parallel, academic literature related to the topic was analysed. The experts’ insights had a greater weight on the structure of the methodology, in comparison with literature. Since the interviewed experts have relevant professional experience in dealing with Portuguese companies and the Portuguese market as a whole, their insights were much more specific than the majority of the found literature. Furthermore, the author only had theoretical knowledge on the subject, so the lack of practical knowledge could eventually harm LJ through an inefficient allocation of resources and design of the retargeting strategy, which is something that could be partially avoided with the experts’ feedback. Finally, one advert set was created, with several ads, used in a campaign created with the goal of filling up one client X’s job opening. These ads generated quantitative data, possible to analyse via Facebook’s Power Editor, and allowed the researcher to conduct basic statistical analysis on the performance of the ads. According to **Malhotra, Naresh K. (2010)**, “quantitative research seeks to quantify the data and, typically, applies some form of statistical analysis” and it is the recommended method when trying to obtain conclusive results. Therefore, and according to the same author, “combining both methods can provide rich insights that can help in formulating successful marketing strategies.”

⁵ The profile of each expert can be found on **appendix F**.

b) Expert Interviews – interview guide and expert profiles

According to **Malhotra, Naresh K. (2010)**, an unstructured interview guide should be used for this research since “the purpose of interviewing experts is to help define the marketing research problem rather than to develop a conclusive solution.”. Additionally, being Portuguese and having experience in dealing with Portuguese companies and consumers, it is fair to assume that the experts can provide specific advice for this particular market. It was decided that two experts should be chosen to conduct the interviews in order to obtain diverse viewpoints on the subject: one of the experts works on the client side, on the digital commerce department of one of the largest retailers operating in Portugal, taking care of the company’s digital strategy and respective implementation; whilst the other expert works on the agency side, working for a digital marketing agency, and being responsible for creating, managing and optimizing the digital marketing campaigns of a portfolio made up of a wide set of different clients. Since both had had past, different yet relevant past professional experiences in the digital commerce space, it was believed that their feedback would enrich the author’s knowledge on the subject. Also, according to **Malhotra, Naresh K. (2010)**, “typically, expert information is obtained by unstructured personal interviews, without administering a formal questionnaire. It is helpful, however, to prepare a list of topics to be covered during the interview. The order in which these topics are covered and the questions to ask should not be predetermined but rather decided as the interview progresses. This allows greater flexibility in capturing the insights of the experts.” Bearing that in mind, the main research questions were the following:

- c) Does it make sense to use Facebook retargeting in the case of LJ?

If the answer to the previous question was “Yes”, then:

- d) What should be the relationship between the company’s resources and the strategy itself (i.e., what resources, how, why, etc.)?
- d) What should be the strategy to be put in place?

If the answer to question a) was “No”, then:

- e) Why do you believe that and what other courses of action would you suggest?

The experts were informed of important information beforehand, regarding both the study and LJ itself beforehand, like LJ's lack of operational agility and budget constraints, and the full interview guide with respective key insights and topics can be found on **appendix E**.

c) Action plan

(1) General overview

The results of the interviews were quite similar - both experts shared the same opinion on most of the topics and sub-topics that emerged throughout the conversation. The experts' answers were also aligned with the literature – both highlighted the importance of knowing well the audience, the characteristics of the platform and the importance of information specificity. Considering the experts' viewpoints, an initial action plan that embodied the key ideas was created. Subsequently, this initial plan was combined with the learnings from the literature found on the subject and similar businesses, as well as with the author's perception of LJ's operational capabilities, leading to the actual and final action plan to be put in place. This plan was based on one main principle: to keep the research methodology as simple as possible, putting an emphasis on practical testing and the experts' insights. Building up a complex strategy and campaign structure would hardly be put in place, not only throughout my research but later as well, due to LJ's lack of organizational operational agility, as previously mentioned. In sum, the methodology that was used had three stages: 1) secondary data analysis (mainly literature), used to get a first outlook on the relevant subjects of this thesis and decide which steps to take next. According to **Malhotra, Naresh K. (2010)**, secondary data is usually less expensive and easily accessible, in comparison with primary data⁶. However, the same author also states that a researcher should start with secondary data and only then use primary data,

⁶ According to the same author, secondary data can help the researcher to identify and better define the research problem, as well as the whole process of developing an approach to the problem formulate an appropriate research design and interpret primary data more insightfully.

following a general rule: “Examination of available secondary data is a prerequisite to the collection of primary data. Start with secondary data. Proceed to primary data only when the secondary data sources have been exhausted or yield marginal returns”; 2) as previously mentioned, due to the lack of literature found on the subject, the author proceeded the research with in-depth interviews with experts, in which qualitative primary data was collected, used to complement the knowledge obtained previously from the secondary data analysed and get insights on how should the strategy be structured; 3) primary data collection via real-time testing by running several ads on Facebook. Primary data was preferred in the last two stages of the action plan after exhausting the secondary data sources, as this is the type of data generated “by a researcher for the specific purpose of addressing the problem at hand [in this case, the research question]”, whereas secondary data is “data that has already been collected for purposes other than the problem at hand” (Malhotra, Naresh K., 2010).

(2) Tests

For this position, the developer should be proficient in coding in Java. The ads ran throughout a 45-day time period, each ad running on a different 15-day sub-period, in which these were consecutively optimized. The optimization was made according to each ad performance results and also to test the postulated hypotheses: different interests were tested, as well as a direct comparison between the different audiences used. For all the tests the type of Facebook audience used was “Website Custom Audience”⁷. Each ad tested one hypothesis: Hypothesis #1 (tested via the CustomW_Java_G_1 ad): retargeting previous website visitors (last 30 days) that have not applied to any of the open positions, will lead to satisfactory⁸ performance results (in terms of conversions); Hypothesis #2 (tested via the CustomW_Java_G_2 ad): including a set of relevant interests related with a specific coding language, when retargeting previous

⁷ More information on the different types of Facebook audiences can be found on **appendix D**.

⁸ Satisfactory in this sense means that a certain ad performed at the same or outperformed previous ads from LJ that did not use the retargeting technique. For example: if the CustomW_Java_G_1 ad for the same cost as another ad from LJ that did not use the retargeting technique generated more conversions, it is said that CustomW_Java_G_1 produced satisfactory results (*coeteris paribus*).

website visitors (last 30 days) that have not applied to any of the open positions, will lead to better performance results than the ones obtained in CustomW_Java_G_1 ad and previous ads that did not use the retargeting technique; Hypothesis #3 (tested via the CustomW_Java_G_3 ad): including a set of relevant interests related with relevant terms for the opportunity at stake, when retargeting previous website visitors (last 30 days, updated audience) that have not applied to any of the open positions, will lead to better performance results in comparison with CustomW_Java_G_1, CustomW_Java_G_2 and previous ads that did not use the retargeting technique. Therefore, the posts were analysed and tested under the following designations: CustomW_Java_G_1; CustomW_Java_G_2; CustomW_Java_G_3. The naming of these posts follows a specific structure created by the company (**appendix I**). The settings of each post can be found on **appendix J**. The list of abbreviations used and its respective definitions can be found on **appendix G**.

6. RESULTS

This section presents the results of each ad used in the research process.

a) Hypothesis #1 - CustomW_Java_G_1

Out of the 40 people who clicked on the ad, 28 completed the application, at a cost of 0,27 € per application, for the 7,50 € that were spread over fifteen days. The ad was displayed 2060 times, reaching 1474 unique individuals, which means that, on average, each individual saw the ad 1,4 times. This audience is purposely relatively broad (considering that it is already not very large right from the start due to being highly niche) and not specific to only individuals who know how to code in Java. The reason for this is the referral scheme LJ has in place to attract more candidates. LJ tries to benefit from network effects, which ultimately determines that if someone knows a developer that can be developer that can be suited for the job, that person can refer that developer through LJ, and if the developer ends up being hired, the person who referred him/her earns the referral reward (for this particular job opportunity the set referral

reward was 375 €). Some of the applications were not valid: six users submitted fake applications. This is not that unusual to happen, as the job and company description on LJ' website does not disclose important pieces of information regarding the position, such as the wage, and some individuals may have tried to obtain more information by submitting a fake application. An application to the job opening does not mean that the applicant is suited for the job - 28 applications does determine 28 good candidates. The conversion cost seems a bit high, in comparison with previous ads from the company, but there is still room for improvement and this initial post generated valuable applicants (according to LJ's team, 7 had a good chance to land one of the positions).

b) Hypothesis #2 - CustomW_Java_G_2

Out of the 44 people who clicked on the ad, 19 completed the application, at a cost of 0,39 € per application, for the 7,50 € that were spread over fifteen days. The ad was displayed 1658 times, reaching 974 unique individuals, which means that, on average, each individual saw the ad 1,7 times. Three people submitted fake applications. Even though the CR and CTR slightly increased, the Avg. CPM, Avg. CPC and cost per conversion also increased.

Possible explanations for these outputs: 1) the number of people who visited the LJ website during the last 30 days who did not apply to any of the open job positions and have a Facebook account is already not that big, which means that it is already a niche audience, thus being making it hard to narrow it down a lot; 2) some of the targeted users of this ad had already been targeted in the previous ad (cannibalism), thus decreasing right from the start the effectiveness of the add; 3) these results may indicate that narrowing down an audience that is already niche may lead to worse results; 4) the time period in which the ad ran (Nov 15 – Nov 30) was not a good time to run it.

c) Hypothesis #3 - CustomW_Java_G_3

Out of the 58 people who clicked on the ad, 21 completed the application, at a cost of 0,36 € per application, for the 7,50 € that were spread over fifteen days. The ad was displayed 1777 times, reaching 1210 unique individuals, which means that, on average, each individual saw the ad 1,47 times. Four people submitted fake applications. Even though the CR slightly decreased, all the other relevant indicators performed better, in comparison with CustomW_Java_G_2, but performed worse in comparison with CustomW_Java_G_1. Possible explanations for these outputs: 1) again, the number of people who visited the LJ website during the last 30 days who did not apply to any of the open job positions and have a Facebook account is already not that big, which means that it is already a niche audience, thus being hard to narrow it down a lot; 2) again, some of the targeted users of this ad had already been targeted in the previous ad (cannibalism), thus decreasing right from the start the effectiveness of the add; 3) there are not many users that only follow pages related with “IT Jobs”, “IT Jobs in Portugal”, “IT Job opportunities” or only “Oportunidades na área das TI” and also “Java”, “Java development” and “Back-end development”. Likely, people who follow the first set of pages also follow the second one; 4) the new audience was more prone to convert than CustomW_Java_G_2.

7. CONCLUSIONS, FUTURE RESEARCH AND RECOMMENDATIONS

This section starts with the main conclusions extracted from the results, followed by the theoretical and practical implications of those same results and respective suggestions of the author for further research. Then, a set of recommendations is presented, regarding not only retargeting but also the way LJ runs its operations.

a) Conclusions

From the results of the tests, the main conclusions that can be withdrawn may have theoretical and practical implications, should these be used in future research. Regarding

CustomW_Java_G_1, The results obtained were already better than the ones from similar posts LJ had launched and, in what regards conversions, outperformed previous posts from LJ (**appendix H**). In sum, the evidence suggests that retargeting generated satisfactory results. In what concerns CustomW_Java_G_2, despite the fact that this ad underperformed, in comparison with CustomW_Java_G_1, the results were still satisfactory: similar posts from the company that did not use the retargeting technique performed on a similar level. However, evidence suggests that the new set of interests did not improve the effectiveness of the ad, thus rejecting the postulated hypothesis. Lastly, regarding CustomW_Java_G_3, this post outperformed CustomW_Java_G_2 but underperformed CustomW_Java_G_1. Nevertheless, the results were still satisfactory. In sum, evidence suggests that the new set of interests may yield investment-worthy results.

b) Theoretical implications and future research

The results of this study have implications for both researchers and practitioners. To the former, this study provides a basis for understanding how retargeting can be applied for companies who have highly niche audiences – which should be the starting points for future studies, approaching similar business challenges. Moreover, the effects on an ad's performance of different set of interests and comparison between updated and non-updated custom audiences on digital marketing campaigns, as the found literature suggests, can boost an ad's performance. Therefore, more research on information specificity applied to niche audiences may help in understanding how companies can use digital marketing channels to create more effective marketing campaigns and targeting techniques. This type of research can benefit not only marketplaces, such as LJ, but also other types of companies that aim at launching marketing campaigns targeting highly niche audiences. Furthermore, the author also believes that further research on the improvement of organizational operational agility related to the implementation of digital marketing innovations should be conducted – even though LJ is a start-up company,

this research was constrained several times by operational inefficiencies.

c) Practical implications and future research

For practitioners, the findings suggest that different settings on the structure and targeting of a digital ad have an impact on the results attained, which is an idea supported by literature. Consequently, doing extensive research on a company's customer base, thus allowing taking a clear picture of what these customers' needs and preferences, may translate into more cost-effective marketing campaigns. Additionally, since in this research the only advertising platform that was used was Facebook, the same sort of tests conducted on other advertising platforms, such as Google, may also generate valuable insights.

d) Recommendations

Even though the main subject of this thesis is retargeting, from dealing directly with the company the author believes that in order to implement an effective retargeting strategy, there should be some changes in its organizational procedures. Therefore, the following set of recommendations does not strictly refer to retargeting, including some operational suggestions as well, since the later highly affects the success of the former.

d1) Retargeting recommendations:

- 1) test education-based interest - running a new ad, also during fifteen days, with the same website custom audience, but now with a set of interests related with schools/universities that train people that may be suited for the job openings of the company (mainly, developers and data scientists). For example: “IST”; “FCT”; “LEIC”; “MIEI”; among others⁹. The idea is to test if this is a type of interests that may help to target more efficiently;
- 2) before starting to further invest on retargeting, as well as other types of digital marketing initiatives, quality prospecting should be done in an attempt to grow LJ's user base – by

⁹ IST stands for Instituto Superior Técnico; FCT stands for Faculdade de Ciências e Tecnologias; LEIC stands for Licenciatura em Engenharia Informática e de Computadores (IST); MIEI stands for Mestrado Integrado em Engenharia Informática (FCT). These are just some examples of institutions and respective programs that train people that may be suited for LJ's opportunities.

firstly creating larger and richer user base first, all the company's future digital marketing costs will decrease. Both Google and Facebook make relevancy an extremely important decision factor on the quality of the websites they have a relationship with – the more relevant a website is, the better the experience for the users. This leads to lower costs on using those platforms when running campaigns: both platforms boost the performance of the best performers, via lower CPCs, CPMs and other metrics., in comparison with their competitors. However, this growth must be achieved cautiously: having a lot of new visitors and Facebook followers who are not really interested in LJ may lead to an increase in the costs when using these platforms' solutions;

- 3) use specific retargeting software – there are companies that are mainly focused on retargeting advertising, such as Criteo and Adroll. Facebook retargeting has a limited reach: it only affects Facebook, Instagram and its audience network. The audience network is made of more than 4 million advertisers that extend Facebook's online reach (**Facebook, 2016b**);
- 4) using Facebook retargeting, test running an add with the same set of interests but for a lookalike audience – this type of audience often yields better results in comparison with other types of audiences, so it may help prospecting and growing the user base for people who still do not know LJ.

d2) Operational recommendations:

- 1) become more operationally agile – the marketing team should have greater control over the budget, the video, image editing and content creation processes and client's brand requirements. Therefore, the author believes the company should update its terms & conditions and make it very clear with their customers what they can and what they cannot do in terms of marketing activities that will expose the client's brand publicly beforehand. Additionally, LJ should either recruit someone for their marketing team with image and video editing skills or train their current marketers, so that they can create content on the

spot, without depending on anyone else. Even though they are short on money at the moment, in the long run a retargeting strategy properly implemented could cut down significantly most of their costs. As so, the author believes it is worth the investment, either on training or on an extra member for their marketing team;

- 2) use specific retargeting software and not a platform-specific one, such as Facebook – using, for example, Adroll, in case LJ decides not to train their current marketing team or hire someone who has this type of expertise, would allow LJ to benefit from those company's account managers to manage the retargeting initiatives, whilst LJ can be focused on its core activities.

8. LIMITATIONS TO THE RESEARCH

Regarding the tests that were ran, there are some limitations in what concerns the robustness of the conclusions that were withdrawn. The highly niched audience makes it hard to narrow it down, due to its specific nature. Additionally, some of the targeted users of ads CustomW_Java_G_2 and CustomW_Java_G_3 had already been targeted in the respective previous ad (cannibalism), thus decreasing right from the start the effectiveness of the add.

Moreover, there are not many users that only follow pages related with “IT Jobs”, “IT Jobs in Portugal”, “IT Job opportunities” or only “Oportunidades na área das TI” and also “Java”, “Java development” and “Back-end development”, which makes it harder to improve the level of accuracy of the targeting. Furthermore, LJ's lack of organizational operational agility, which slowed most of the processes down combined with client X's public exposure guidelines deeply constrained the research process. Finally, the time periods may not matter significantly for the results of these tests.

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